SEVERE STORMS FOR JUNE 1949

[The table hereunder contains such data as have been received concerning severe storms that occurred during the month.]

Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks
Northern Cass and southern Jackson Counties, Mo.	June 1	12:02-12:15 a. m .	440	0	\$100,000	Tornado	of town. Much damage to barns, corn cribs, hog houses, poultry and other farm buildings; some blown down. Telephone and
Southern Howard, south- eastern Saline Counties, and scattered areas of Ran- dolph, Linn, Platte, Cole, and Boone Counties, Mo.	1	12:30-3 a. m		1	5,000	Tornadoes, wind, and electrical.	light wires broken and scattered. Many trees damaged or de- stroyed. Crop damage estimated at \$12,500, included in total. Tornadoes struck Franklin and Nelson communities, resulting in heavy damage at each place. Boonville, New Franklin, Fayette, Columbia, and Moberly had some damage, mostly to trees, by strong winds. Man killed when he contacted a power line which had blown down. Telephone operator slightly injured when lightning struck building housing exchange at Weston. 9 cows killed by lightning mar Columbia. Home at Jefferson City set
Nance County, Nebr Kearney to north of Gibbon, Nebr.	1 1	Noon 12-12:30 p, m	. 15		100, 000 82, 000	Haildo	afire by lightning. Slight crop damage by moderate hail. Path 20 miles long. Crop damage \$57,000; other property \$25,000. Path 15 miles long.
Kosciusko, Miss Rawlins County, Kans	1 1	3 p. m	1 3		150, 000	Thundersquall Hail	Trees uprooted, power and communication lines severed. Storm caused damage over path 15 miles long in south-central part of county. Mostly crops damaged.
Nebraska City (3½ miles west), Nebr.	1	5:40 p. m	100	0	20, 000	Tornado	Damage mostly to farm buildings.
Page County, Iowa	1	6:15-6:30 p. m	100-200	0	350, 000	Tornadoes, with hall	This most destructive twister had its beginning 3 miles east and a mile south of Shenandoah. It passed across southeastern Bingham. Intensity of storm increased and path began to widen 2 miles northeast of Bingham. Crib with over 10,000 bushels of corn scattered so far that little was recovered. Storm path 10 miles long. About 2 to 2½ miles east of where first tornado reached its peak, a second tornado was in evidence, with path northeastward and parallel to No. 1. Tornado No. 2 less destructive and path only about 5 miles long. 4 farms almost totally destroyed and 8 farms hit with varying degrees of damage. Although eye witnesses reported a 3d funnel farther east, no evidence was apparent from the air. 4 persons injured; one received scalp wounds from large hallstones, which averaged 1 inch in diameter with largest sizes near 2½ inches. Livestock loss rather large. Livestock and crop damage estimated at near \$50,000.
Nemaha County, Kans	1	7:15 p. m	450	0	75, 000	Tornadoes	A disc blade was found buried 3 inches deep in a tree. Path of destruction began about 3 miles east of Baileyville and extended northeastward approximately 15 miles, ending 1 mile east of Bern. Numerous farm homes, barns, and auxiliary build- ings destroyed. Many trees, power and communication lines damaged. Weil-developed, long, slender funnel-shaped cloud observed. A second funnel cloud reported over Seneca about 20 minutes effer first one, but it did not reach ground.
New Orleans, LaSouthwest, northwest, and central Iowa.	1	9 p. m Evening and night.				Electrical and wind. Wind	High winds knocked down power lines hear Prescott, severing power between Des Moines and southwestern Iowa. Many points reported local damage from broken tree limbs or overturned small buildings. At Shenandoah 2 inches of rain fell in an hour. Crop damage minor, except in southwest near tornado
Winside (5 miles south), Nebr.	1		13	- 	15, 000	Hail and wind	area. Hailstones small, but numerous and accompanied by high wind.
Oshkosh (northwest of), Nebr.	1		1 3		52, 275	Hail	Path 10 miles long. Grass and crop damage estimated at \$52,000 included in total. Backs of range cattle bruised.
Falls City (west of), Nebr	1-2	8 p. m. to after midnight.	12	0	790, 000	Tornado and rain	About half of damage to crops and remainder to buildings and live- stock. Severe flood loss in lowlands, and soil erosion and wash- ing out of corn in rolling uplands.
Eastern Atchison and Carroll Counties, Mo.	1-2	P. m7 a. m		0		Tornado and wind	Tornado destroyed and damaged farm buildings about 5 miles southeast of Tarkio, injuring several persons. At Carroliton high winds damaged at least 1 house, broke a number of power lines and
Jackson County, Kans	2		13			Hail	trees, and set rock decorations atop court house at precarious angle. Hail, mostly small, but ranging up to 1 inch in diameter, damaged gardens and crops over several square miles southwest of Soldier.
Caddo County, Okla	2	a. m. 7–7:45 p. m	67	0	3, 000	Tornado	Storm circled an area of 1 mile in radius, 3 miles northeast of Alfalfa. 3 funnels observed: 1 touching ground, tearing up large grove of
Post, Garza County, Tex	2		1 10		40, 000	Wind and hail	trees. I barn unroofed. 40 square miles of crops will have to be replanted. Hail moderate; largest, size of golf balls. Wind damage, \$24,000; hail, \$16,000. All damage to cotton and wheat.
Jackson County, Okla Meeker (near), Colo	2 3	Night 4 a. m	1 3		20, 000	Rain and wind Hail	Considerable damage to ripe wheat. 3.40 inches of rain fell at Altus. Hallstones from \(\frac{5}{2} \) to \(\frac{3}{4} \) inch in diameter covered ground to depth of \(2 \) inches. Practically all crops within an area from near Meeker
Pawnee County, Kans	3	Early morning	11	 	10,000	do	station to 8 miles north a total loss. Storm moved southeastward in northern portion of county over path 3 miles long. Hail mostly size of marbles. Crops main loss.
Marion County, Kans	3	12:30 p. m	12		150, 000	do	Damage extended over path 10 miles long near Lost Springs, in northern part of county. Many hailstones as large as hens' eggs.
Osage County, Kans Sumner County, Kans	3 3	1:30 p. m 1:30 p. m	1 3	0	5, 000 6, 000	Tornado and wind.	Storm path 4 miles long. Mostly crop damage. Only damage resulting from tornado was to large barn 6 miles northwest of Wellington. High wind caused some damage over 3-
Roger Mills and Ellis Counties, Okla.	3	3:30-7:20 p. m			125,000	Tornadoes, wind, hail, and electrical.	mile path in same area. In area 5 x 30 miles west of Leedey, from Strong City to east of Arnett. Loss of \$100,000 to crops and \$25,000 to roofs and glass by bell 2 tornade funnels reported by did not reach grant.
Houma, La	3	3:45 p. m				Thundersquall	2 animals killed by lightning. Trees uprooted and limbs broken. Telephone and power lines down for several hours. Advertising signs blown down. North and porthess of signer at Bartheville, royard porthesst.
Washington County, Okla	3	4-4:15 p, m		0	0	Tornado	North and northeast of airport at Bartlesville; moved northeast-ward for about 2½ miles in open country, filling air with debris. No property in path.
Northeastern Monroe and southern Marion Coun- ties, Mo.	3	5:20 p. m		0	0	do	Tornado cloud estimated to be about 1,000 feet above ground, passed over Monroe City moving northeastward.
Leedey (near), Okla Prowers County, Colo	4 4-5	1:30 a. m			2, 500 1, 750, 000	Wind Rain, hail, and floods.	High, straight, gusty wind from southeast. Debris in line of path, Flash flood, caused by nearly 7 inches of rain, swept over lower Arkansas River Valley, mainly in areas of Bristol, Lamar, and Holly. As much as 4 feet of debris piled up in many places, Highway traffic halted and 100 feet of Santa Fe Railway track washed out.

¹ Miles instead of yards.

Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks
Florence-Portland area, Colo.	June 5	5 a. m6 p. m	1 8		\$250,000	Rain, hail, and floods.	Downpours causing a wall of water 10 feet above flood stage, in- undated Florence-Portland area in southeastern Fremont County; heavy damage to buildings, railroads, and highways. 31 homes
Muskogee, Okla	5	10:30 a. m	14	0	1,000	Tornadoes	swept away or upset.
Cloud County, Kans	5	3-4 p. m	12			Hail	Storm moved eastward over path 8 miles long across southern portion of county.
Molena, Ga	5	Afternoon			3,000	Wind and hail	portion of county. High winds and hall damaged houses, outbuildings, and turkey sheds; also, blew down or delimbed a few trees. About 1,000 turkeys killed.
Shell, Wyo Nashville, Tenn	5 5	5 p. m		0		Tornado Thunderstorm, with rain and hail.	Principal damage to trees, fences, and windows. Electric wires downed in various sections of city. Heavy trees felled in Thompson Lane-Franklin road area. Damage to Cascade Swimming Pool, \$300 to \$400.
Buffalo, Wyo	5	5-6 p. m		0		Tornado and hail	Slight damage to growing crops by hall. Tornado funnel failed to
Boise County, Idaho	5	7 p. m			 	Rain	reach ground. Runoff from heavy rain concentrated in small draw swept mud,
Colorado Springs, Colo	6	12:02-4:36 p. m	14		20,000	Wind, hail, and rain	boulders, and trees across Boise-Idaho City Road, blocking traffic for 4 hours. Slide occurred about 25 miles from Boise. Storm path 20 miles long, east of Colorado Springs. Hail, piling up to 6 inches, resulted in damage to crops, livestock, and buildings. Much damage also to streets and highways by runoff. Funnel struck open country southwest of city, passing within 3
Roswell, N. Mex	6	3:30 p. m	300	0		Tornado and hail	ings. Much damage also to streets and highways by runoff. Funnel struck open country southwest of city, passing within 3 miles of Walkor Field. No buildings in path of storm. Path approximately 12 miles long. Heavy hail reported. Little
Cimarron, N. Mex	6	P. m		0	0	Tornado	damage. Small funnel reported over range land about 4 miles east of Cimar-
Devine, Medina County,	6	Evening		0	500,000	Hail	ron.
Tex. Dunlay, Medina County,		dodo			100,000	Wind and hail	cotton leveled.
Tex. Biry, Medina County, Tex.	6		1 1 1 1 1		100,000	Hail	crops not damaged by hail. 32 acres of corn ruined.
Buffalo, Wyo	6 7	1:40-6 p. m	1 5-6	0	5, 500	Tornado. Wind and hail	Funnel failed to reach ground. Hail, 14 to 15 inch in diameter, caused crop loss estimated at \$3,000, involving chiefly watermelous, cotton, vegetables, and peamuts. Property damages due more from lightning than wind, affecting 2 residences and 1 garage; 800 telephones and almost all long distance lines out of service; heavy damage to high voltage line.
							distance lines out of service; heavy damage to high voltage line. Storm moved for 10 miles southward.
Optimo and vicinity, N.	7	2 p. m			2,000	Hail	Principal damage to beans and small grains.
Mex. Osage County, Kans	7	2 p. m	880	0	5,000	Tornado	Funnel-shaped cloud dipped to ground 4 or 5 miles north of Quenemo, damaging barns and other farm buildings. Path about
Green County (central portion), Mo.	7	3:20 p. m		0	25,000	Tornado, electrical, and hail.	I mile long. Small tornado damaged trees, farms, and small business places in small area just west of Springfield. Some high voltage lines, fused by wind cut of nower in some area. Lightweet in the
m 1 G 4 - 011	_						some damage in scattered places. Hallstones measured up to 4 inches in circumference, with some damage to gardens and crops.
Tulsa County, Okla		4 p, m		1 1	l	Wind	accompanied by light, small hail.
Montgomery, Ala	7	4-4:45 p. m			4, 220	Thundersquall	Destroyed hangar at Norman Bridge Airport, and slightly damaged some small airplanes with flying debris. Damage confined to small area, with some timbers and roof sections blown 2 to 5 hundred feet.
Jefferson Parish, La	7	Early afternoon.			-	Hail	Heavy hail of brief duration lashed small area east of the River and
Saline County, Kans	7			ŀ	ļ	do	A number of farms near New Cambria suffered almost 50 percent
Chaves County (southern part), N. Mex.	7	P. m			1	do	Scattered crop damage. Cumulative loss to crops from hall for
Montgomery County, Kans.	7-8	Noon to 8 a. m			8,000	do	Path northeastward from county line south of Cofferville to Edna
Kingsville, Kleberg County, Tex. Albany, Ga	8 8	1 a, m 3:15-6 p. m	1 5 1 3–5		5,000 1,000	Wind and hail	\$3,500; hail, \$1,500. Lightning struck 2 homes, burning out wiring and burning holes in
Bonneville, Madison, and Jefferson Counties, Idaho.	8	4:20-6:30 p. m			75,000	Rain and wind	celling and fool of 1. Great number of telephones out of service; some knocked out by storm of previous day. Storm 4 miles northwest of Light Folls and in Poherts Managers.
Concord (near), Ga	8	Afternoon			1,000	Wind and hail	Damage to crops estimated at \$75,000, 30 percent by high wind and 70 percent by rain. At Idaho Falls Airport 0.69 inch of rain fell in 25 minutes. Storm moved southeastward for about 3 miles, with heavy hall in
							spots but mostly away from crop fields. High winds caused all damage, which included 2 barns unrooled, 2 tenant houses moved from their foundations, minor damages to other buildings, and
Belvidere, Nebr	i	6:42 p. m	100	3	75,000	Tornado	Some trees nown down. Path 1 mile long. 7 persons injured. A brick restaurant demolished and adjoining buildings damaged. Damage to buildings.
Shelton, Nebr Portales, N. Mex	8 8	7:30 p. m 7:45 p. m		- -	500 30,000	Wind Hail and rain	Damage to buildings. Wheat, cotton, and volume row crops demaged over considerable
Horse Cave, Ky	i .	3-3:45 p. m	1	1	30,000	Electrical	area east of city.
			i	1			hoory electrical and rain atoms
Marshall, Wyo Sarasota, Fla Fergus County (north portion), Mont.	9 10 10	4 p. m		1	0 0 1,200	Tornado Waterspout Hail	Damage to small grain and gardens.
Absarokee, Mont. St. Louis, Mo. Alfalfa County (southern	11 11	3-3:30 p. m 5-6 p. m 9:15-11:45 p. m	880		1,000	do. Wind. Rain.	Damage to hay and grain, Wires down and tree limbs broken in various parts of city
Alfalfa County (southern half), Okla.	11	9:15-11:45 p. m.			450, 000	Rain	Damage to nay and gram, Wires down and tree limbs broken in various parts of city. Unofficial rainfall of more than 9 inches reported south of Cherokee. Heavy local flooding at Cherokee; about 200 homes had from 1/5 to 3 feet of water. \$100,000 damage to buildings. Total crop loss in area 17 x 20 miles; estimated \$350,000. Lightning struck and burned barn and contents. Tornado damage
Ainsworth (316 miles north- northwest), Nebr.	12	12:15 p. m	100	0	10, 000	Tornado and elec-	Lightning struck and burned barn and contents. Tornado damage
northwest), Nebr. Perham and vicinity, Minn.	12	12:30 p. m	Į		500	trical. Thundersqualls	slight. Scaffolding at new bank building blown down; several trees up- rooted and branches broken off; wires down.
		1	l	1	1	1	rooted and branches broken off; wires down,
Medicine Bow, Wyo Milwaukee, Wis	12 13	2 a. m				Rain Electrical	I small bridge washed out by flash flood. Lightning set fire to dwelling. Fallen electric wire set fire to small garage. Chimney struck by lightning. Utility wires broken by falling tree limbs.

¹ Miles instead of yards.

MONTHLY WEATHER REVIEW

Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks
Nambe, N. Mex	June 13	1 p. m			\$1,500	Hail and rain	Gardens and fruit main loss. Roofs and windows of some homes
Reedy and vicinity, W. Va	13	5:30 p. m		1	 	Electrical, rains, and winds.	by fire set by lightning. Some damage to other buildings and
Crawford County (north-	13	Night		1		Electrical	
eastern portion), Mo. Jacksonville, Tex	14	11:30 a. m	1			Wind	youth. Many large trees broken, garage demolished, and many windows
Dayton, Liberty County,	14	2 p. m	1	- 	10, 000	do	blown out. Most damage confined to 1 store; 2 other stores slightly damaged.
Tex. Endee, N. Mex	14	4 p. m	1	l	60, 000	Hail	Grains total loss, estimated \$60,000. Row crops will have to be replanted. Undetermined damage to buildings; every house in
gut la Dandle and Vinge.	15	2-4 p. m	110			do	town will need reroofing; houses north of town badly damaged.
Spink, Beadle, and Kings- bury Counties, S. Dak. Pipestone, Rock, and Nobles	15	8 p. m	i		35, 000	đo	
Counties, Minn. Magic Reservoir, Blaine	15	Late afternoon		2		Wind	small grains a total loss. Sudden, severe windstorm on backwaters of Magic Reservoir
County, Idaho. Scott. Clark, and Washing-	15		i	l .		Rain and flash flood	caused boat bearing 3 fisherman to capsize; 2 drowned. Damage to crops estimated at \$60,000; roads and dwellings, \$40,000.
ton Countles, Ind. Grant and Morton Countles,	16	8 p. m	1	1		Hail	Most damage in northeastern Grant County where some crops 100
N. Dak. Columbia Falls, Mont	16			-	 	Wind	percent loss. Damage to telephone lines.
Mike Horse, Mont Bitterroot Valley, Mont	16-17 16-17	3 p. m.–2 p. m. 6 p. m.				Snow Rain and snow	Branches of shade and cherry trees broken by snow: large amount
Anaconda, Mont	16–17					Snow	giani. At Georgetown Bake to miles west of Anaconda, 22
Boulder, Mont	16–17	9 n. m		 -		do	Wet snow broke trees, shrubs, and garden plants, and caused
Deer Lodge, Mont	16–17	11 p. m3 p. m_	t .	1	l .	đo	Wet snow broke many shade trees, and caused death of freshly
Philipsburg, Mont	16-17		1	1	1	do	snorn sneep.
Seattle, Wash	17	4:11-5 p. m				Thunderstorm	in diameter on wires. Small, occasional damage to windows and trees. 2 small boats
Willmar and vicinity, Minn.	17	5:07 p. m			25, 000	Thundersqualls	capsized in Lake Washington; no lives lost. Strong convectional storm developed very rapidly with sudden wind shift from north to southeast. Extreme velocity, recorded at Seattle office, only 26 m. p. h. from southeast at 4:11 p. m. Reports of tornado not verified, twisting effect apparently resulting from wind shift.
w mmar and vicinity, wimi-	11	8.07 p. m			20,000	and hail.	and farm machinery damaged. Light to moderate hail caused
Yuma, Colo	17	5:30-5:55 p. m		0	25,000	Tornado, hail, and rain.	storm first struck to miles southwest of x uma and moved in semi- circle to northeast. Many farm buildings damaged by tornado.
Eckley, Colo	17	6 p. m		i	l	Wind, hail, and rain.	Trees stripped of leaves and bark. Growing crops driven into ground.
Phoenix, Ariz	17	6-7 p. m	Ì			Thunderstorm and wind.	Power and telephone services disrupted as poles were blown down.
Wray, Colo Dundy and Hitchcock Counties, Nebr.	17 17	6:30 p. m 8:30-10:30 p. m	1 3-10		2,000 1,000	Wind, hail, and rain. Hail and wind	Some windows broken, roofs damaged, cars dented, and many trees damaged.
Casa Grande and Eloy, Ariz.	17	Evening				Wind	toll line.
Augusta and Rockingham Counties, Va.	17-18		1				
Tucker, Pendleton, Grant, Hardy Countles, W. Va.	17–19; 27					Rains	South Branch of Potomac River to rise rapidly to flood stages. Over 1,200 homes and business places reported damaged or destroyed; bridges washed away; over 100,000 poultry and livestock drowned and many more injured or marooned; crops ruined; automobiles caught in flood waters and damaged; communications and power services disrupted; water supplies contaminated; roads washed out; mountain slides covered lowlands with debris and changed courses of small streams. 7 or more persons missing in addition to 5 drowned. Property damage estimated at several million dollars.
Rawlins County, Kans	18	Evening				Hail	Most destruction along 8-mile path at extreme north side of county. Storm moved eastward.
Hayden, Ariz	18	Evening			50, 000	Thunderstorm, wind, and flash flood.	Communication disrupted. Nearly 100 houses damaged. Number of trees and poles blown down. Several homes flooded by flash flood in canyon between Millside and Smelterside. Portion of roof blown off mill and smelter. A 6-car garage lifted from its foundation and demolished, portions of building carried 1 block by wind,
Secotan, Fla	18		. 50	0	0	Tornado	Small twister in south end of Taylor County. A few trees broken and twisted off. Path short.
Ridgway, Mont Ekalaka (northwest of),	19 19	Afternoon				Wind and hail	Crops damaged and small buildings blown over. Damage to grain, peas, beans, and beets.
Mont. Little Falls and vicinity, Minn.	20	6 a. m	12		15,000	Thundersquall with hail.	A number of farm buildings demolished or otherwise damaged. Heavy hall damaged growing crops. \$5,000 damage due to hall, included in total.
Greenville, Pa	20	1:40-2:25 p. m				Rain, wind, flash flood, and electri- cal.	Man knocked down when lightning struck church wall, toppling concrete block wall into recently built basement auditorium. High winds ripped trees and awnings, and sent an overhead crane at Steel Car plant off its track and onto ground. Water from flash flood reached depth of 4.5 to 5 feet on Stewart Ave., engulfing parked cars. For first time in memory of local residents, gushing torrents overflowed curbs and sidewalks, and flowed in front doors of several business places on Main Street. Observer reported 2.52 inches of rain fell in 45 minutes. Most water damage resulted when storm severs became clogged.
Ute, Iowa	20	6:45 p. m		1		Electrical	

¹ Miles instead of yards.

		S.	EVERE	210	RMS FOI	R JUNE 1949—C	Jontinued
Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks
Sac City, Iowa	June 20	7 p. m			\$22, 500	Wind	building damaged. 2 planes upset, with 1 completely demol-
Putnam County (central	20	Night				Electrical	ished. Lightning struck and burned large barn west of Unionville. Elec-
portion), Mo. Allegany, County, Md	20	P. m				Cloudburst and floods.	trical appliances at a home in town burned out by lightning. A cloudburst broke over Dan's Mountain west of Cumberland, sending torrents of water into valley areas on both sides of the mountain. Traffic disrupted when many low points on highways inundated. Speedy waters carried huge rocks and tons of dirt from hills, depositing much of it on roads below. Some
Argyle and vicinity, Minn	20	P. m	1 214		70, 000	Hail	dirt from hills, depositing much of it on roads below. Some cellars flooded. Moderate to heavy hail, that accompanied a severe thunderstorm, caused much damage to growing crops. Small grains damaged
Hermansville, Mich	21	9—10:30 p. m		<u> </u>		Electrical, wind, and	from 10 to 100 percent. Several buildings wrecked. Over 2 inches of rain fell in 1½ hours.
Chouteau County, Mont	21			1	l I	rain. Hail	Some damage to wheat over 3-mile path in the northwestern portion
Sonnette, Mont	21					do	of county. Hail ½ to ¾ inch in diameter caused severe damage to wheat, oats, alfalfa, and native hay, completely destroying some fields. Windows broken, and buildings badly damaged. Gardens destroyed,
Lemington, Essex County, Vt.	, 21					do	and many chickens killed. Hailstones were from 1 inch up and seemed to be a fused mass of smaller stones, although still large hexagonal crystals of ice. Considerable damage to gardens and glass.
Omaha and vicinity, Nebr Sanford, Fla	22 22	Midnight to late afternoon. 7 a. m			80, 000 50	Hail and rain	Path 4 miles long. Heaviest damage to green houses. Some washing damage to streets. 2 houses struck by lightning.
Nelson (4 miles west), Nebr. Gage County (northwestern portion), Nebr.	22 22	5:45 p. m 6-6:30 p. m	880 1 4		2, 500 75, 000	Haildodo	Path approximately 3 miles long. Damage mostly to crops.
Auburn, Nebr	22 22 22	7:30 p. m Nightdo			35, 000	Wind. Electrical. Wind.	\$30,000 damage to airplanes and hangar; \$5,000 to other property. Woman burned by lightning which struck light cord on bed. Violent thunderstorm wind, described locally as a "twister", swept through narrow belt of town, felling trees and damaging light and
Secotan, Fla	22					Electrical	telephone wires. A small roadside stand demolished. Lightning burned out about 200 yards of Forest Service telephone
Morgan County, Ill	23	2:30 p. m			100, 000	Wind, bail, and rain.	ings damaged by high winds. Many trees blown down, blocking traffic and disrupting utility services. Hail caused considerable damage to growing crops, mainly wheat, corn, and oats. Heavy
Lincoln, Nebr	23	Late afternoon and early eve-	14			Rain	rain. Some basements flooded, widespread flooding of streets. Considerable damage to wires.
Ralls County (northeastern portion), Mo.	23	ning. 4:15-7:25 p. m	1 15		4, 200	Wind and rain	milroads and county roads. Cron loss astimated at \$2.200.
De Witt, Iowa	23	9:45 p. m				Wind	buildings overturned and trees uprooted. Telephone and power
Mountain Park, N. Mex Cloud County, Kans	24 24	1 p. m 3 p. m	880			Haildo	Crops and fruit damaged.
Nodaway County (central portion), Mo.	24	5–5:15 p. m		0		Tornadoes	Storm occurred about 14 miles southwest of Concordia in path 1 mile long. A few fields damaged 25 percent. Eyewitness reported 2 small funnel clouds estimated to be ¼ mile apart. I never quite touched ground, but the other after dipping several times, finally struck west and northeast Maryville in path over ½ mile long before dissipating. Considerable damage to windows, roofs, small outbuildings, trees, and to telephone and light wires and poles. Thunderstorms, with heavy rain, hall, and strong winds, rather widespread. At Van Meter, 1.60 inches rain fell in an hour and winds uprooted many trees. At Mystic, near Centerville, heavy rains sent Walnut Creek over its banks in small flash flood. At
Iowa	24	Afternoon and evening.					Allendorf, east of Sibley, a torrential rain accompanied by half flattened crops. A number of wires down in Des Moines from broken tree limbs
Jackson and Pike Counties, Ohio.	24	Evening				Wind	Moderate damage to power and communication lines. Root blown from 2 barns. Roads blocked by fallen trees. Light to moderate hall, that accompanied a severe thunderstorm,
Jackson and vicinity, Minn Fortine, Mont	24	p. m		ĺ	20,000	Hail	damaged growing crops. Some fields of small grains damaged from 50 to 90 percent.
Minneapolis, St. Paul, and vicinity, Minn.	24 25	6 p. m			55, 000	Thundersqualls with bail.	Damage to grain, gardens, and Christmas trees. 3 barns blown down; many trees uprooted or branches broken off; wires down; 11 cows killed; city and farm buildings, and auto- mobiles damaged. Hail damaged growing crops and property, especially greenhouses. Hail damage of \$25,000, included in total.
Jacksonville Beach, Fla	26	3 p. m				Electrical	Lightning struck an electric power transformer controlling draw- bridge between beaches and Jacksonville while bridge was lifted; service interrupted for an hour.
Seward County, Kans	26	7–8 p. m	17		150, 000	Hail	Most damage over about 5 sections southwest of Liberal and 6 sections northeast of town. Stones size of walnuts. Damage to buildings, \$25,000; wheat loss, \$125,000. Path extended from north-central part of county south about 20 miles to near Okla-
Lane, Gove, and Scott Counties, Kans.	26	7–8 p. m	<u>-</u>		25,000	Hail and wind	homa line. Path about 25 miles long over eastern Scott, southern Gove, and western Lane Counties. Hailstones ranged from less than 14 inch to core? inches in dispersion of the core of the state of the core of
Ohio, most of state	26	Evening				Wind and electrical.	inch to over 3 inches in diameter. Little loss except to wheat. Barn destroyed by lightning near Columbus, estimated \$10,000 damage. 6 persons injured by lightning at Ravenna and 1 near Columbus. Child injured by falling tree at Zanesville. Lightning did \$75,000 damage to factory at Hamilton. 2 horses killed by lightning. Minor crop damage by wind.
Logansport, Ind	26			1	. '	Rain and flash flood; wind and hail.	Streets flooded; some houses surrounded by water. Wabash River did not overflow.
Washington County, Kans- Hillsboro (near), Wis	26-27 27	During night				Hail and rain Electrical and wind	Occurred north of Hanover. Complete loss of wheat in some places. Phone and electric wires down. Tree limbs broken. 11 head of eattle killed by lightning.
Tennyson, Wyo	27	2-3 p. m 3-3:15 p. m			50,000	Hail Hail and wind	Crop damage estimated 10 to 30 percent in small area. Hailstones comparatively small, but wind driven; severe damage to small vegetation.
Cheyenne County (south- western portion), Nebr. ¹ Miles instead of yards.	27	5 p. m	1 2			Hail	Path 12 miles long. Damage to wheat varied from little to total loss, but latter areas very small. Damage spotted.

		SE.	VERE	2101	KIMIS FOI	R JUNE 1949	Continued
Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks
Southeastern Nebraska	June 27	Late afternoon		1		Rain	age \$16,000 to \$20,000 in Douglas County. Man swept from stall-
Cheyenne County, Kans	27	7 p. m	1 12		\$1,000,000	Hail and wind	ed car and drowned in flash flood near Crab Orchard.
Thomas County, Kans	27	7-8 p. m. and 8:30-8:45 p. m.	15		250, 000	do	Path of damage extended from Levant to Rexford, about 25 miles. The second hailstorm much more severe. Stones varied in size from small to 3 inches in diameter. High wind occurred after hail had fallen. Wheat chief loss, but other crops, roofs, and sid-
Thomas County, Kans	27	7 p. m	18		1,000,000	Hail	ing of houses, and store windows also damaged. Northwestern portion of county hardest hit. Path southeastward 18 miles long. Hallstones ranged in size from 14 inch to size of
Sheridan County, Kans	27	9:30–10 p. m	1 2-4			Hail and wind	along path about 20 miles long. Hail size of golf balls. Storm
Ottawa County, Kans	27	11 p. m	11		12,000	Wind	moved eastward. Considerable wheat flattened by wind. Storm in and near Minneapolis resulted in some property loss and extensive damage to wheat by lodging. Telephone and power lines blown down.
Wheeling and vicinity, W.	27	Evening			50,000	Rains and wind	City streets flooded. Carnival equipment suffered wind damage.
Va. Iowa, western portion	27	Evening				Rain and hail	A torrential rain dumped nearly 4 inches of rain in downtown Coun-
Rawlins County, Kans		Evening				Hail and wind	cil Bluffs and vicinity shortly after 6 p. m. Main street in Council Bluffs under 3 feet of water in places; many motorist stalled or temporarily trapped. Some hail fell in eastern part of town. In vicinity of Dow City in Crawford County, severe hailstorm shredded growing crops in area several miles wide and 6 miles long. Only a small acreage totally destroyed, as most crops expected to recover quickly. Area east and south of McDonald and Beardsly in west-central part of county damaged, mostly from hail. Wind broke trees,
						_	damaged power lines, and broke plate glass windows in some stores.
Washington County, Kans	27	During night	12		3, 500	do	inst south of Greenleaf: nath 3 or 4 miles long
Berkshire County (northern portion), Mass.	27					Wind, electrical, and rain.	Trees blown down across power and telephone lines by winds estimated at 45 m. p. h. Lightning struck transformers crippling electric service for several hours. Some main streets in North
Mitchell and Cloud Counties, Kans.	27-28	9:10 p. m2 a. m			750, 000	Wind and hail	areas not clearly defined. Several funnel-shaped clouds observed from 10 to 10:30 p. m., but none reached ground. Much wheat matted to ground by high wind and very heavy rain. Loss of wheat, corn, oats, and alfalfa estimated at \$800,000 included in
Dickinson County, Kans	28	2 a. m	11		25, 000	Wind	north for about 10 miles, causing considerable property and crop- damage. Roofs blown off: plate glass windows broken; trees, power and telephone lines blown down. Small grain flattened
South Bend and Mishawaka,	28	1 p. m.	l		ł	do	Trees and wires down.
Ind. Carroll and Cass Counties,	28	4 p. m	12		1, 100	Wind and hail	Hail up to ¼ inch in diameter; \$1,000 damage to crops included in total.
Ind. Good Hope, Horry County,	28	4 p. m		1		Electrical	
S. C. Upper Stewarts Creek and Hinzman Run Valleys be- tween Linn and Glenville,	28	6-8 p. m			17,000	Rains	Flash flood washed away and destroyed a house, washed away garage, undermined house foundation, destroyed outbuildings, ruined crops, did minor damage to roads, and destroyed livestock and poultry.
W. Va. Belmont County, Ohio	28	6:20 p, m			15,000	Wind and electrical.	Trees and wires blown down. Minor lightning and hail damage. Trees broken.
Conrad, Mont Lincoln (northeastern por-	28 29	6:20 p, m 5 a, m			30,000	Wind Electrical	Grocery store struck and set afire; interior and contents destroyed.
tion), Nebr.	29	5:45 p. m		1		Wind	Aviator killed, and passenger seriously injured in plane crash.
Ingham and Livingston Counties, Mich.	29	Afternoon				Electrical, wind, rain, and hail.	Storm struck Williamston, destroying shed and 9 hogs, and burned barn. 2 barns near Mason, and 1 house near Howell struck by lightning and burned.
Vega, Oldham County, Tex North Dakota, entire State	29 29	6 p. m Early evening	13		3, 000 120, 000	Wind and hall Wind	Wheat downed. Wind damage, \$600; hail, \$2,400. Many farm buildings and some crops damaged, mostly in north-eastern part of State. Damage to buildings, \$90,000; damage to crops, \$30,000.
Cumberland and vicinity, Md.	29	P. m				Rains, wind, and electrical.	Termed by some as cloudburst, with measured fall of 2.42 inches in Cumberland. Heavy rains, lightning, and winds combined to disrupt at least 2,000 telephones, paralyze fire department's com- munication system, and damage trees, shrubbery and streets.
Telegraph Creek, Mont	29		1 5-10		2,000	Wind	Small buildings and roofs damaged, 2 granaries moved; haystacks
Glasgow, Mont	29				10,000	do	damaged: some poultry killed. Wind, reaching peaks of 55 m.p. h., blew rocks through windows, damaged roofs, blew signs over, and caused complete loss of air-
Polk County, Minn	30	1 a, m			30,000	Thundersquall	plane and damage to another. Several barns and outbuildings demolished; many buildings damaged; poles and wires down; trees uprooted or branches broken off; signs, billboards, and awnings torn away; growing crops damaged.
Stanley, Wis	30			1		Electrical	Death by lightning. Do.
Phillips (near), Wis	30			1			

¹ Miles instead of yards.

LATE STORM REPORTS FOR MARCH, APRIL, AND MAY 1949

Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks
Columbia (6 miles southeast), S. C.	March 9	4:30 p. m		1	\$3,000	Electrical	A bolt of lightning struck 1 person and destroyed home by fire.
Iowa, northwestern half	April 14					Snow	Heavy snowstorm accompanied by 40 m, p, h, northerly winds. Falls of 6 to 8 inches general over wide area from Woodbury County to Winneshiek County. Highways temporarily blocked by drifts 3 to 4 feet deep; many motorists maroned 6 to 24 hours. Most damage confined to power and telephone lines. One of the 4 greatest snowstorms of record for so late in the season. Snow provided needed moisture for small grain and spring seedings.
Claiborne Parish, La	May 1	5 p. m		0	25, 000	Tornado	Path about 4 miles south of Homer. 12 persons injured. 5 homes and 4 barns destroyed. Storm crossed oil field, but did little damage.
Wilkes-Barre and Wyoming Valley, Pa.	5	4-6 p. m			50, 000	Electrical and wind.	
Duncannon, Pa	5	4:45-5 p. m		· • • • • • • • • • • • • • • • • • • •	30,000	Thunderstorms	
Wilkes-Barre and vicinity, Pa.	6	5:30-9:30 p. m			25, 000	Electrical	Series of 3 thunderstorms. Lightning caused numerous fires, 3 barns on 2 farms destroyed. Transformer hit by lightning. Power and telephone lines downed.
Philadelphia and vicinity, Pa.	7	2-6 p. m		1		Electrical and hail	Hall damaged fabric on 10 airplanes at North Philadelphia Airport and on 2 airplanes at Flying Dutchman Airport at Somerton. Hundreds of panes of glass in greenhouses broken and hundreds of plants damaged by hail. Halistones so large and numerous that golfers unable to find their golf balls among them. Some hallstones as large as hens' eggs. Farmer killed when struck by lighting.
Cheyenne, Wyo Sumner County, Kans	20 20	12:45 p. m 8-9 p. m	880	0	25, 000	Tornado Hail and wind	Funnel sighted, but did not reach ground.
Zelienople, Altoona, and Johnstown, Pa.	22	4 p. m		1		Tornadoes and thunderstorms.	Violent storm sweeping from southwest produced 2 twisters. Oue cut 100-yard-wide path in South Zelienople. Other swept down Carson Valley into southwest section of Altoona. In South Zelienople small buildings at Lutheran Old Peoples Home and Orphanage damaged. Storm preceded by rain, and half "as big as cherries." Combination garage and workshop leveled, with damage of \$4,000. A dog and chickens were thrown through the air as a shed toppled over. A cow badly injured and had to be destroyed. At Harmony Junction. 3 miles outside Zelienople, high winds and rain knocked out about 6,000 window panes of greenhouse. Roof lifted off house. Foundation of garage moved, damaging new car. A 64-year-old man electrocuted near Johnstown, when he tried to pick up fallen "live" wire. 3 others in that area hurt, when tree fell on car. All electric and power lines south of Johnstown down. In Johnstown area, man injured when tree struck by lightning fell on him; another stunned when lightning struck his home. Large barn flattened near Lloyddell killing 2 sheep. Roofs of 2 barns torn off near Boswell. (This information is additional to damage reported in May MONTHUM WEATHER REVIEW for storm in Beaver and Butler Counties, Pa., on May 22.)
Masontown, "Uniontown, and Dunbar, Pa.	22	4:30-5:30 p. m	112			Wind, hall, and electrical.	Storm from southwest; path 20 miles long. Storm lasted barely it minutes at each individual spot, but took about 1 hour to cross whole area. 2 persons in Uniontown stunned by lightning. Fire started by lightning, destroyed 2-story frame house near Point Marion. Damage estimated \$12,000. Telephone and power lines downed; some out of service throughout night. Storm first hit near Ronco, attended by heavy hail. Storm from west entered Uniontown, covering entire city. Storage building at Connellsville Airport capsized and blown 75 feet. Garage near Dunbar unroofed. Roads blocked by fallen trees, and some property damage from fallen trees. 2 trees uprooted, silo blown down, and part of roof blown off barn near Waynesburg. Garages and other small buildings destroyed, trees uprooted, roofs torr off, chimneys knocked down, windows broken in all parts of Uniontown. Tall smoke stack doubled over. Large frame barr damaged. Downtown streets inundated to depth of several inches at height of storm, with lumber from a lumber company being swent across road by water.
Lehigh, Berks, and Nor- thampton Counties, Pa.	22	7:30- 9 :30 p. m		0		Tornado, hail, and electrical.	At Hosensack 2 persons injured, and 5 chicken houses containing 5,200 chickens demolished by tornado. Many power failures and many trees blown down. Lightning set fire to 1 house in Allentown. Gusts reached 85 m. p. h. at Allentown-Bethlehem-Easton Airport. Garage demolished at Coopersburg, but car inside barely scratched. Hall at Coopersburg. 3 barns smashed along Limeport-Steinsburg road. 4 poultry houses smashed at Wescoville. House unroofed at Lenhartsville. 1 mile north of Allentown, a war-surplus glider carried up and over a 1-story building and dropped upside down on highway. Many roads temporarily blocked by fallen trees, utility poles, and "hot" wires. Telephone and electric services disrupted for several hours.

¹ Miles instead of yards.

LATE STORM REPORTS FOR MARCH, APRIL, AND MAY 1949—Continued

			Width	Loss	Value of		
Place	Date	Time	of path, yards	of life	property destroyed	Character of storm	Remarks
Clayton, Pa	May 22	7:30-9:30 p. m.		0		Tornado and thun- derstorm.	Huge barn wrecked. At a hoslery mill rear wall blown in, front wall blown out, and roof caved in. Nearby 3 homes damaged, and 2-story garage demolished. 5 persons injured when 3-story house was unroofed. Several other houses partly unroofed and otherwise damaged in Bally-Clayton area. In Palm, a stone house unroofed and stone walls badly cracked. Another stone house partly unroofed. 100-year old trees uprooted and twisted. Barn unroofed and twisted. Wind shift clouds at Pottstown
Harrisburg and Hummels- town, Pa.	22	8:30-9:30 p. m		0		Tornadoes and thunderstorms.	from 8:30 to 8:50 p. m. were dull orange color. High winds, heavy rain, 34-inch hailstones, and at least 1 small twister moved eastward. Strong winds blew down many big trees in River Park, completely blocking Front Street for 15-20 blocks. House roof blown off, felling several light poles and side-swiping other homes. Several cars damaged by trees falling on them. Signs and small stands damaged store windows. Fallen power lines resulted in several spot fires, causing limited property damage. Near Hummelstown, side of stone house blown out; several barns unroofed. A partially finished home demolished and another new home blown down. Roof of grocery store blown through air about 75 feet, damaging home. Highways near Hummelstown, Annville, and Lebanon, and locally in Harrisburg closed to auto traffic for several hours, until fallen trees and debris could be cleared.